



#E 20  
DRIVER  
5-17-03

Attorney's Docket No.: 42390P5277

## DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below, next to my name.

I believe I am the original, first, and sole inventor (if only one name is listed below) or an original, first, and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

### METHOD AND SYSTEM FOR VIDEO FRAME ENHANCEMENT USING EDGE DETECTION

RECEIVED

APR 09 2003

Technology Center 2600

the specification of which



is attached hereto.

was filed on 09/11/1998 as

United States Application Number 09/151,555

or PCT International Application Number \_\_\_\_\_

and was amended on \_\_\_\_\_

(if applicable)

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claim(s), as amended by any amendment referred to above. I do not know and do not believe that the claimed invention was ever known or used in the United States of America before my invention thereof, or patented or described in any printed publication in any country before my invention thereof or more than one year prior to this application. I do not know and do not believe that the claimed invention was in public use or on sale in the United States of America more than one year prior to this application, nor do I know or believe that the invention has been patented or made the subject of an inventor's certificate issued before the date of this application in any country foreign to the United States of America on an application filed by me or my legal representatives or assigns more than twelve months (for a utility patent application) or six months (for a design patent application) prior to this application.

I acknowledge the duty to disclose all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, Section 119(a)-(d), of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

Prior Foreign Application(s):

APPLICATION NUMBER	COUNTRY (OR INDICATE IF PCT)	DATE OF FILING (day, month, year)	PRIORITY CLAIMED UNDER 37 USC 119
			<input type="checkbox"/> No <input type="checkbox"/> Yes
			<input type="checkbox"/> No <input type="checkbox"/> Yes
			<input type="checkbox"/> No <input type="checkbox"/> Yes

I hereby claim the benefit under Title 35, United States Code, Section 119(e) of any United States provisional application(s) listed below:

APPLICATION NUMBER	FILING DATE

I hereby claim the benefit under Title 35, United States Code, Section 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, Section 112, I acknowledge the duty to disclose all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, Section 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application:

APPLICATION NUMBER	FILING DATE	STATUS (ISSUED, PENDING, ABANDONED)

I hereby appoint with full power of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected herewith, BLAKELY SOKOLOFF TAYLOR & ZAFMAN LLP, a firm including: Ramin Aghevli, Reg. No. 43,462; William E. Alford, Reg. No. 37,764; Farzad E. Amini, Reg. No. 42,261; W. Thomas Babbitt, Reg. No. 39,591; Jordan M. Becker, Reg. No. 39,602; Michael A. Bernadicou, Reg. No. 35,934; Roger W. Blakely, Jr., Reg. No. 25,831; R. Alan Burnett, Reg. No. 46,149; Gregory D. Caldwell, Reg. No. 39,926; Thomas M. Coester, Reg. No. 39,637; Florin Alin Corie, Reg. No. 46,244; Mimi D. Dao, Reg. No. 45,628; Stephen M. De Klerk, Reg. No. 46,503; Daniel M. DeVos, Reg. No. 37,813; Sanjeet K. Dutta, Reg. No. 46,145; Tarek N. Fahmi, Reg. No. 41,402; Thomas S. Ferrill, Reg. No. 42,532; George L. Fountain, Reg. No. 36,374; Angelo J. Gaz, Reg. No. 45,907; Andre M. Gibbs, Reg. No. 47,593; James Y. Go, Reg. No. 40,621; Mark A. Goldstein, Reg. No. 50,759; Michael D. Graham, Reg. No. 51,751; Melissa A. Haapala, Reg. No. 47,622; Alan E. Heimlich, Reg. No. 48,808; James A. Hcrry, Reg. No. 41,064; William E. Hickman, Reg. No. 46,771; Libby H. Hope, Reg. No. 46,774; Willmore F. Holbrow III, Reg. No. 41,845; Sheryl Sue Holloway, Reg. No. 37,850; George W. Hoover II, Reg. No. 32,992; Eric S. Hyman, Reg. No. 30,139; William W. Kidd, Reg. No. 31,772; Walter T. Kim, Reg. No. 42,731; Eric T. King, Reg. No. 44,188; Steven Laur, Reg. No. 47,736; Suk S. Lee, Reg. No. 47,745; Gordon R. Lindeen III, Reg. No. 33,192; Jan C. Little, Reg. No. 41,181; Julio Loza, Reg. No. 47,758; Joseph Lutz, Reg. No. 43,765; Lawrence E. Lycke, Reg. No. 38,540; Michael J. Mallic, Reg. No. 36,591; Andre L. Marais, Reg. No. 48,095; Raul D. Martinez, Reg. No. 46,904; Paul A. Mendonsa, Reg. No. 42,879; Jonathan S. Miller, Reg. No. 48,534; Richard A. Nakashima, Reg. No. 42,023; Thien T. Nguyen, Reg. No. 43,835; Thinh V. Nguyen, Reg. No. 42,034; Robert B. O'Rourke, Reg. No. 46,972; Daniel E. Ovanezian, Reg. No. 41,236; Gregg A. Peacock, Reg. No. 45,001; Philip A. Pedigo, Reg. No. 52,107; Marina Portnova, Reg. No. 45,750; Joseph A. Pugh, Reg. No. 52,137; James H. Salter, Reg. No. 35,668; William W. Schaal, Reg. No. 39,018; James C. Scheller, Reg. No. 31,195; Saina S. Shamilov, Reg. No. 48,266; Kevin G. Shao, Reg. No. 45,095; Stanley W. Sokoloff, Reg. No. 25,128; Judith A. Szepesi, Reg. No. 39,393; Edwin H. Taylor, Reg. No. 25,129; Lisa Tom, Reg. No. 52,291; John F. Travis, Reg. No. 43,203; Thomas J. Treutler, Reg. No. 51,126; Kerry D. Tweet, Reg. No. 45,959; Mark C. Van Ness, Reg. No. 39,865; Thomas Van Zandt, Reg. No. 43,219; Lester J. Vincent, Reg. No. 31,460; Glenn E. Von Tersch, Reg. No. 41,364; John P. Ward, Reg. No. 40,216; Mark L. Watson, Reg. No. 46,322; Thomas C. Webster, Reg. No. 46,154; and Norman Zafman, Reg. No. 26,250; my patent attorneys, and Brent E. Vecchia, Reg. No. 48,011; and Lehua Wang, Reg. No. 48,023; my patent agents, with offices located at 12400 Wilshire Boulevard, 7th Floor, Los Angeles, California 90025, telephone (310) 207-3800; and James R. Thein, Reg. No. 31,710, my patent attorney. I also appoint Alan K. Aldous, Reg. No. 31,905; Rob D. Anderson, Reg. No. 33,826; R. Edward Brake, Reg. No. 37,784; Ben Burge, Reg. No. 42,372; Robert A. Burtzloff, Reg. No. 35,466; George Chen, Reg. No. 50,807; Kenneth J. Cool, Reg. No. 40,570; Jeffrey S. Draeger, Reg. No. 41,000; Cynthia Thomas Paatz, Reg. No. 39,973; Christopher K. Gagne, Reg. No. 36,142; Sharmini N. Green, Reg. No. 41,410; Robert A. Greenberg, Reg. No. 44,133; Jeffrey B. Huter, Reg. No. 41,086; John Kacvinsky, Reg. No. 40,040; Seth Z. Kalson, Reg. No. 40,670; Bradley A. Greenwald, Reg. No. 34,341; David J. Kaplan, Reg. No. 41,105; John F. Kacvinsky, Reg. No. 40,040; Peter Lam, Reg. No. 44,855; Issac Lin, Reg. No. 50,672; Anthony M. Martinez, Reg. No. 44,223; Larry Mennemeier, Reg. No. 51,003; Paul Nagy, Reg. No. 37,896; Dennis A. Nicholls, Reg. No. 42,036; Leo V. Novakoski, Reg. No. 37,198; Lanny L. Parker, Reg. No. 44,281; Kevin A. Reif, Reg. No. 36,381; Thomas C. Reynolds, Reg. No. 32,488; Kenneth M. Seddon, Reg. No. 43,105; Mark Seeley, Reg. No. 32,299; Steven P. Skabrat, Reg. No. 36,279; Howard A. Skaist, Reg. No. 36,008; Paul E. Steiner, Reg. No. 41,326; Robert G. Winkle, Reg. No. 37,474; Sharon Wong, Reg. No. 37,760; Steven D. Yates, Reg. No. 42,242; Calvin E. Wells, Reg. No. 43,256; Michael Willardson, Reg. No. 50,856 and Charles K. Young, Reg. No. 39,435; my patent agents, of INTEL CORPORATION; with full power of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected herewith. with full power of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected herewith.

Send correspondence to:

Howard A. Skaist, Reg. No. 36,008, BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN, LLP

(Name of Attorney or Agent)

12400 Wilshire Boulevard, 7th Floor, Los Angeles, California 90025 and direct telephone calls to:

Howard A. Skaist (503) 684-6200.

(Name of Attorney or Agent)

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full Name of Sole/First Inventor (given name, family name) Rajeeb Hazra

Inventor's Signature RAJEEB HAZRA Date \_\_\_\_\_

Residence Beaverton, Oregon USA Citizenship India USA  
(City, State) (Country)

Mailing Address 16635 SW Ivy Glenn St.  
Beaverton, Oregon 97007 USA

Full Name of Second/Joint Inventor (given name, family name) Ravi K. Sharma

Inventor's Signature \_\_\_\_\_ Date \_\_\_\_\_

Residence Portland, Oregon USA Citizenship India  
(City, State) (Country)

Mailing Address 1305 NW Mayfield Road  
Portland, Oregon 97229 USA

Full Name of Third/Joint Inventor (given name, family name) \_\_\_\_\_

Inventor's Signature \_\_\_\_\_ Date \_\_\_\_\_

Residence \_\_\_\_\_ Citizenship \_\_\_\_\_  
(City, State) (Country)

Mailing Address \_\_\_\_\_



**DECLARATION AND POWER  
OF ATTORNEY FOR PATENT  
APPLICATION**

☐ Declaration  
Submitted  
with Initial  
Filing

OR

☒ Declaration  
Submitted after Initial  
Filing (surcharge  
(37 CFR 1.16(e))  
required)

Attorney Docket Number 42390P5277

First Named Inventor Rajeeb Hazra

**COMPLETE IF KNOWN**

Application Number 09/151,555

Filing Date September 11, 1998

Art Unit 2624

Examiner Name Rogers, S.

**As a below named inventor, I hereby declare that:**

My residence, mailing address, and citizenship are as stated below, next to my name.

I believe I am the original and first inventor (if only one name listed below) or an original and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

**METHOD AND SYSTEM FOR VIDEO FRAME ENHANCEMENT USING EDGE DETECTION**

*(Title of the Invention)*

the specification of which

☐ is attached hereto.

OR

☒ was filed on 09/11/1998 as United States Application Number 09/151,555  
or PCT International Application Number \_\_\_\_\_  
and was amended on \_\_\_\_\_ (if applicable)

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claim(s), as amended by any amendment specifically referred to above.

I do not know and do not believe that the claimed invention was ever known or used in the United States of America before my invention thereof, or patented or described in any printed publication in any country before my invention thereof or more than one year prior to this application. I do not know and do not believe that the claimed invention was in public use or on sale in the United States of America more than one year prior to this application, nor do I know or believe that the invention has been patented or made the subject of an inventor's certificate issued before the date of this application in any country foreign to the United States of America on an application filed by me or my legal representatives or assigns more than twelve months (for a utility patent application) or six months (for a design patent application) prior to this application.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

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Docket No. 042390.P5277

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I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or (f), or 365(b) of any foreign application(s) for patent, or inventor's or plant breeder's rights certificate(s), or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent, inventor's or plant breeder's rights certificate(s), or any PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application(s):

Prior Foreign Application Number(s)	Country	Foreign Filing Date (MM/DD/YYYY)	Priority Not Claimed	Certified Copy Attached?
			<input type="checkbox"/>	<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/>	<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/>	<input type="checkbox"/> Yes <input type="checkbox"/> No

I hereby appoint the persons listed on Appendix A hereto (which is incorporated by reference and a part of this document) as my respective patent attorneys and patent agents, with full power of substitution and revocation, to prosecute this application and to transact all business in the U.S. Patent and Trademark Office connected herewith.

Direct all correspondence to: ☒ Customer Number or Bar Code Label  or ☐ Correspondence address below  
\*08791\*

Name			
Address			
City	State	Zip Code	
Country	Telephone (503) 684-6200	Fax	(503) 684-3245

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

**NAME OF SOLE OR FIRST INVENTOR:** ☐ A petition has been filed for this undersigned inventor

Full Name: Rajeeb Hazra  
(First, Middle [if any], Family Name (or Surname), and Suffix [if any])

Inventor's Signature \_\_\_\_\_ Date \_\_\_\_\_

Residence Beaverton, Oregon USA Citizenship India  
(City, State, Country) (Country)

Mailing Address 16635 SW Ivy Glenn St.  
Beaverton, Oregon 97007 USA

**NAME OF SECOND INVENTOR:** ☐ A petition has been filed for this undersigned inventor

Full Name: Ravi K. Sharma  
(First, Middle [if any], Family Name (or Surname), and Suffix [if any])  
Inventor's Signature *R Sharma* Date February 28, 2003  
Residence Portland, Oregon USA Citizenship India  
(City, State, Country) (Country)  
Mailing Address 4247 NW 125th Ave.  
Portland, Oregon 97229 USA

**NAME OF THIRD INVENTOR:** ☐ A petition has been filed for this undersigned inventor

Full Name: \_\_\_\_\_  
(First, Middle [if any], Family Name (or Surname), and Suffix [if any])  
Inventor's Signature \_\_\_\_\_ Date \_\_\_\_\_  
Residence \_\_\_\_\_ Citizenship \_\_\_\_\_  
(City, State, Country) (Country)  
Mailing Address \_\_\_\_\_  
\_\_\_\_\_

**NAME OF FOURTH INVENTOR:** ☐ A petition has been filed for this undersigned inventor

Full Name: \_\_\_\_\_  
(First, Middle [if any], Family Name (or Surname), and Suffix [if any])  
Inventor's Signature \_\_\_\_\_ Date \_\_\_\_\_  
Residence \_\_\_\_\_ Citizenship \_\_\_\_\_  
(City, State, Country) (Country)  
Mailing Address \_\_\_\_\_  
\_\_\_\_\_

**NAME OF FIFTH INVENTOR:** ☐ A petition has been filed for this undersigned inventor

Full Name: \_\_\_\_\_  
(First, Middle [if any], Family Name (or Surname), and Suffix [if any])  
Inventor's Signature \_\_\_\_\_ Date \_\_\_\_\_  
Residence \_\_\_\_\_ Citizenship \_\_\_\_\_  
(City, State, Country) (Country)  
Mailing Address \_\_\_\_\_  
\_\_\_\_\_

## Appendix A

I hereby appoint with full power of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected herewith, BLAKELY SOKOLOFF TAYLOR & ZAFMAN LLP, a firm including: Ramin Aghevli, Reg. No. 43,462; William E. Alford, Reg. No. 37,764; Farzad E. Amini, Reg. No. 42,261; W. Thomas Babbitt, Reg. No. 39,591; Jordan M. Becker, Reg. No. 39,602; Michael A. Bernadicou, Reg. No. 35,934; Roger W. Blakely, Jr., Reg. No. 25,831; R. Alan Burnett, Reg. No. 46,149; Gregory D. Caldwell, Reg. No. 39,926; Thomas M. Coester, Reg. No. 39,637; Mimi D. Dao, Reg. No. 45,628; Stephen M. De Klerk, Reg. No. 46,503; Daniel M. DeVos, Reg. No. 37,813; Sanjeet K. Dutta, Reg. No. 46,145; Tarek N. Fahmi, Reg. No. 41,402; Thomas S. Ferrill, Reg. No. 42,532; George L. Fountain, Reg. No. 36,374; Adam Furst, Reg. No. 51,710; Angelo J. Gaz, Reg. No. 45,907; Andre M. Gibbs, Reg. No. 47,593; James Y. Go, Reg. No. 40,621; Mark A. Goldstein, Reg. No. 50,759; Michael D. Graham, Reg. No. 51,751; James A. Henry, Reg. No. 41,064; William E. Hickman, Reg. No. 46,771; Libby H. Hope, Reg. No. 46,774; Willmore F. Holbrow III, Reg. No. 41,845; Sheryl Sue Holloway, Reg. No. 37,850; George W. Hoover II, Reg. No. 32,992; Eric S. Hyman, Reg. No. 30,139; William W. Kidd, Reg. No. 31,772; Walter T. Kim, Reg. No. 42,731; Eric T. King, Reg. No. 44,188; Steven Laut, Reg. No. 47,736; Suk S. Lee, Reg. No. 47,745; Gordon R. Lindeen III, Reg. No. 33,192; Jan C. Little, Reg. No. 41,181; Joseph Lutz, Reg. No. 43,765; Lawrence E. Lycke, Reg. No. 38,540; Michael J. Mallie, Reg. No. 36,591; Andre L. Marais, Reg. No. 48,095; Raul D. Martinez, Reg. No. 46,904; Paul A. Mendonsa, Reg. No. 42,879; Jonathan S. Miller, Reg. No. 48,534; Richard A. Nakashima, Reg. No. 42,023; Thinh V. Nguyen, Reg. No. 42,034; Robert B. O'Rourke, Reg. No. 46,972; Daniel E. Ovanezian, Reg. No. 41,236; Philip A. Pedigo, Reg. No. 52,107; Marina Portnova, Reg. No. 45,750; Joseph A. Pugh, Reg. No. 52,137; James H. Salter, Reg. No. 35,668; William W. Schaal, Reg. No. 39,018; James C. Scheller, Reg. No. 31,195; Saina S. Shamilov, Reg. No. 48,266; Kevin G. Shao, Reg. No. 45,095; Stanley W. Sokoloff, Reg. No. 25,128; Judith A. Szepesi, Reg. No. 39,393; Edwin H. Taylor, Reg. No. 25,129; Lisa Tom, Reg. No. 52,291; John F. Travis, Reg. No. 43,203; Thomas J. Treutler, Reg. No. 51,126; Kerry D. Tweet, Reg. No. 45,959; Mark C. Van Ness, Reg. No. 39,865; Thomas Van Zandt, Reg. No. 43,219; Lester J. Vincent, Reg. No. 31,460; Glenn E. Von Tersch, Reg. No. 41,364; John P. Ward, Reg. No. 40,216; Mark L. Watson, Reg. No. 46,322; Thomas C. Webster, Reg. No. 46,154; and Norman Zafman, Reg. No. 26,250; my patent attorneys, and Brent E. Vecchia, Reg. No. 48,011; and Lehua Wang, Reg. No. 48,023; my patent agents, with offices located at 12400 Wilshire Boulevard, 7th Floor, Los Angeles, California 90025, telephone (310) 207-3800; and James R. Thein, Reg. No. 31,710, my patent attorney. I also appoint Alan K. Aldous, Reg. No. 31,905; Rob D. Anderson, Reg. No. 33,826; R. Edward Brake, Reg. No. 37,784; Ben Burge, Reg. No. 42,372; Robert A. Burtzlauff, Reg. No. 35,466; George Chen, Reg. No. 50,807; Kenneth J. Cool, Reg. No. 40,570; Jeffrey S. Draeger, Reg. No. 41,000; Cynthia Thomas Faatz, Reg. No. 39,973; Christopher K. Gagne, Reg. No. 36,142; Sharmini N. Green, Reg. No. 41,410; Robert A. Greenberg, Reg. No. 44,133; Bradley A. Greenwald, Reg. No. 34,341; Jeffrey B. Huter, Reg. No. 41,086; John Kacvinsky, Reg. No. 40,040; Seth Z. Kalsen, Reg. No. 40,670; John F. Kacvinsky, Reg. No. 40,040; Peter Lam, Reg. No. 44,855; Issac Lin, Reg. No. 50,672; Anthony M. Martinez, Reg. No. 44,223; Larry Mennemeier, Reg. No. 51,003; Paul Nagy, Reg. No. 37,896; Dennis A. Nicholls, Reg. No. 42,036; Leo V. Novakoski, Reg. No. 37,198; Lanny L. Parker, Reg. No. 44,281; Michael A. Proksch, Reg. No. 43,021; Kevin A. Reif, Reg. No. 36,381; Crystal D. Sayles, Reg. No. 44,318; Kenneth M. Seddon, Reg. No. 43,105; Mark V. Seeley, Reg. No. 32,299; David M. Simon, Reg. No. 32,756; Steven P. Skabrat, Reg. No. 36,279; Howard A. Skaist, Reg. No. 36,008; Paul E. Steiner, Reg. No. 41,326; Calvin E. Wells, Reg. No. 43,256; Robert G. Winkle, Reg. No. 37,474; Sharon Wong, Reg. No. 37,760; Steven D. Yates, Reg. No. 42,242 and Charles K. Young, Reg. No. 39,435; and my patent agent Michael Willardson, Reg. No. 50,856; of INTEL CORPORATION; with full power of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected herewith. with full power of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected herewith.